1. Canceled

2. (currently amended) ~~A method in accordance with claim 1~~In a communications receiver having a feedback equalizer filter including filter coefficients, said communications receiver responsive to a received signal, said communications receiver further having an input filter responsive to said received signal to form soft decision samples corresponding to said received signal, and a slicer responsive to said received signal to form hard decision samples corresponding to said received signal, said soft decision samples and said hard decision samples comprising a series of individual signal samples, a method for operating said feedback equalizer filter comprising:

operating said feedback equalizer filter in a first mode by coupling said soft decision samples to said feedback equalizer filter;

operating said feedback equalizer filter in a second mode by coupling said hard decision samples to said feedback equalizer filter;

operating said feedback equalizer filter in said first mode during a signal acquisition period;

operating said feedback equalizer filter in said second mode during a signal tracking period;

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switching from said second mode to said first mode responsive to a first individual signal sample;

switching back from said first mode to said second mode responsive to a second individual signal sample,

whereby said feedback equalizer filter is switched between said first and second modes on an individual sample by sample basis, and

wherein the steps of switching from said second mode to said first mode and switching back from said first mode to said second mode on the individual sample by sample basis comprise switching between said first and second modes in accordance with the quality of said first and second individual signal samples, said steps the steps of switching further comprising:

measuring the quality level of said first individual signal sample;

measuring the quality level of said second individual signal sample;

coupling an individual one of said soft decision samples to said feedback equalizer filter when said quality of said first individual signal sample is at a first quality level; and

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coupling an individual one of said hard decision samples to said feedback equalizer filter when said ~~quality of said~~ second individual signal sample is at a second quality level,

wherein said second quality level is greater than said first quality level.

3. (currently amended) A method in accordance with claim 2, wherein said individual signal samples are represented as constellation points in a complex plane, and wherein said first individual signal sample is at said first quality level when outside of a square region of said complex plane forming a ~~box~~ square of width w, said square region of said complex plane being centered about the origin of said complex plane, and said second individual signal sample is at said second quality level when inside said square region of said complex plane.

4. (currently amended) A method in accordance with claim 2, wherein said individual signal samples are represented as constellation points in a complex plane, wherein said method includes calculating the least means squares error of said second individual sample, and wherein said first individual signal sample is at said first quality level when outside of a square region of said complex plane forming a ~~box~~ square of width w, said square region of said complex plane being centered about the origin of said complex plane, and said second individual signal sample is at said second quality level when inside said square region of said complex plane and the least means squares error of said second individual signal sample is less than a predetermined threshold level t.

5. (currently amended) A method in accordance with claim 4, wherein said predetermined threshold level t is represented as a reliability area comprising a region of said complex plane forming a circle centered on ~~said~~ a second constellation point in said complex plane representing said second individual signal sample.

6. (currently amended) A method in accordance with claim 4, wherein said predetermined threshold level t is represented as a reliability area comprising a region of said complex plane forming a ~~box~~ square centered on ~~the~~ a constellation point in said complex plane representing said second individual signal sample.

7. (currently amended) A method in accordance with claim 3, further including evaluating a number of past signal samples from said series of individual signal samples forming a block of past signal samples wherein the width w of said square region of said complex plane is selected responsive to the qualities of said block of past signal samples.

8. (currently amended) A method in accordance with claim 4, further including evaluating a number of past signal samples from said series of individual signal samples forming a block of past signal samples wherein said predetermined threshold level t is selected responsive to the qualities of said block of past signal samples.

9. (currently amended) A method in accordance with ~~claim 1~~ 2, wherein said method includes calculating the constant modulus algorithm, and wherein said first mode is a

signal acquisition mode using said soft decision samples and said constant modulus algorithm to update said filter coefficients of said feedback equalizer filter.

10. (currently amended) A method in accordance with claim ~~1~~ 2, wherein said method includes calculating the least means squares error of said second individual sample, and wherein said second mode is a signal tracking mode using said hard decision samples and ~~said~~ the least means squares error to update said filter coefficients of said feedback equalizer filter.

11. Canceled.

12. (currently amended) ~~A decision feedback equalizer arrangement in accordance with claim 11~~ In a communications receiver having a feedback equalizer filter including filter coefficients, said communications receiver responsive to a received signal, said communications receiver further having an input filter responsive to said received signal to form soft decision samples corresponding to said received signal, and a slicer responsive to said received signal to form hard decision samples corresponding to said received signal, said soft decision samples and said hard decision samples comprising a series of individual signal samples, a decision feedback equalizer arrangement comprising:

a switch operable in a first mode, to couple said feedback equalizer filter to said soft decision samples during a signal acquisition period, said switch further operable in a

second mode, to couple said feedback equalizer filter to said hard decision samples during a signal tracking period; and

a switch control responsive to a first individual signal sample to operate said switch from said second mode to said first mode, and responsive to a second individual signal sample to operate said switch from said first mode to said second mode,

whereby said feedback equalizer filter is switched between said first and second modes on an individual sample by sample basis, and

wherein said feedback equalizer filter is operated in said first and second modes in accordance with the quality of said first and second individual signal samples, said feedback equalizer filter being operated in said first mode by said switch control when said ~~quality of said~~ first individual signal sample is at a first quality level, said feedback equalizer filter being operated in said second mode by said switch control when said ~~quality of said~~ second individual signal sample is at a second quality level, wherein said second quality level is greater than said first quality level.

13. (currently amended) A decision feedback equalizer arrangement in accordance with claim 12, wherein said individual signal samples are represented as constellation points in a complex plane, and wherein said first individual signal sample is at said first quality level when outside of a square region of said complex plane forming a ~~box~~ square of width w, said square region of said complex plane being centered about the origin of said

complex plane, and said second individual signal sample is at said second quality level when inside said square region of said complex plane.

14. (currently amended) A decision feedback equalizer arrangement in accordance with claim 12, wherein said decision feedback equalizer arrangement further includes means for calculating the least means squares error of said second individual sample wherein said individual signal samples are represented as constellation points in a complex plane, and wherein said first individual signal sample is at said first quality level when outside of a square region of said complex plane forming a ~~box~~ square of width w, ~~said~~ square region of said complex plane being centered about the origin of said complex plane, and said second individual signal sample is at said second quality level when inside said square region of said complex plane and the least means squares error of said second individual signal sample is less than a predetermined threshold level t.

15. (currently amended) A decision feedback equalizer arrangement in accordance with claim 14, wherein said predetermined threshold level t is represented as a reliability area forming a region of said complex plane comprising a circle centered on ~~said~~ a second constellation point in said complex plane representing said second individual signal sample.

16. (currently amended) A decision feedback equalizer arrangement in accordance with claim 14, wherein said predetermined threshold level t is represented as a reliability area comprising a region of said complex plane forming a ~~box~~ square centered on ~~the~~ a

constellation point in said complex plane representing said second individual signal sample.

17. (currently amended) A decision feedback equalizer arrangement in accordance with claim 13, further including means for evaluating a number of past signal samples from said series of individual signal samples forming a block of past signal samples wherein the width w of said square region of said complex plane is selected responsive to the qualities of a said block of past signal samples.

18. (currently amended) A decision feedback equalizer arrangement in accordance with claim 14, further including means for evaluating a number of past signal samples from said series of individual signal samples forming a block of past signal samples wherein said predetermined threshold level t is selected responsive to the qualities of said block of past signal samples.

19. (currently amended) A decision feedback equalizer arrangement in accordance with claim 11 12, further including means for calculating the constant modulus algorithm, and wherein said first mode is a signal acquisition mode using said soft decision samples and said constant modulus algorithm to update said filter coefficients of said feedback equalizer filter.

20. (currently amended) A decision feedback equalizer arrangement in accordance with claim 11 12, further including means for calculating the least means squares error of said

second individual sample, wherein said second mode is a signal tracking mode using said hard decision samples and said least means squares error to update said filter coefficients of said feedback equalizer filter.

21.- 35. Canceled.